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A GENERIC SYNOPSIS OF BRACHISTINI
(HYMENOPTERA: BRACONIDAE) AND RECOGNITION
OF THE NAME CHARMON HALIDAY

W. R. M. MASON

Biosystematics Research Institute, Research Branch, Agriculture Canada,
Ottawa, Ontario, K1A 0C6

ABSTRACT—The genera of Brachistini are discussed and keyed, and all Nearctic and some Palearctic species are assigned to genera. *Eubadizon* Nees is an invalid emendation of *Eubazus* Nees, which is a valid genus with *Calyptus* Haliday and *Brachistes* Wesmael as subgenera (new status). The application of *Calyptus* is stabilized by designation of a neotype for the type species, *E. macrocephalus* Nees. *Eubadizon* (s. str. Auct.) is replaced by *Charmon* Haliday with *Provancheria* Ashmead as a new synonym, and the genus is transferred to Orgilini. *Allodorus* Foerster is a valid genus. A New World segregate of *Aliolus* Say is described as *Nealiolus* new genus. Triaspidini and Calyptini are junior subjective synonyms of Brachistini.

The braconid generic names *Eubazus* Nees, *Eubadizon* Nees, *Brachistes* Wesmael, *Calyptus* Haliday, and *Allodorus* Foerster have been used in a number of conflicting ways in recent literature (Muesebeck 1951, 1958, 1970; Tobias 1967; Martin 1956; Docavo Alberti 1960; Čapek 1970; Marsh 1970; Shenefelt 1970). Since no progress toward a solution seems to be forthcoming and since the confusion involves both zoological and nomenclatural questions, I hope that a thorough airing of all aspects of the problem may produce uniformity of usage in the future.

NOMENCLATORIAL PROBLEMS

In 1814 Nees ab Esenbeck described the genus *Eubazus* with two included species, *E. macrocephalus* Nees and *E. pallipes* Nees. The name *Eubazus* appears only once as a centered heading on page 214. Nees gives no hint of its derivation anywhere in the paper. The fact that the name *Eubazus* is repeated in the index to Vol. VI on page 316 cannot be taken as proof that it was not an inadvertent error because the index may have been copied from the published

article by the editor of the journal. Thus there appears to be no intrinsic evidence either for or against the occurrence of a lapsus in the original publication. The next evidence appears in Nees' publication of 1818 when the name *Eubazus* is repeated with no hint that it is a lapsus. Finally, in 1834, Nees mentioned the name *Eubazus* and stated it to be "errore calami vel typographico" for *Eubadizus* which he changed into *Eubadizon*. The names *Eubadizus* and *Eubadizon* (Nees 1834) thus appear first on page 233 of the monograph. The name *Eubadizon* appears also in the key on page 198 and in the index on page 316. However, the running heads at the top of pages 233, 234 and 236 are *Eubazus*. I interpret the last piece of evidence as definite proof that Nees continued to use *Eubazus* (as he and other authors had been doing since 1814) until the book was in page proof and the running heads had been set by the printer. Sometime after this, Nees evidently discovered his error in transcription from the Greek and introduced the emendation into the publication. He obviously was careful enough to change the names in the key and index, but probably never saw the running heads since they are usually set by the printer as required for page proof. The evidence makes it abundantly clear that there was no lapsus in the case of *Eubazus* but only an instance of incorrect derivation from Greek. The international rules (Article 32 (a) ii) state unequivocally that an error in transliteration is not to be accepted as a lapsus; therefore the emendation of *Eubazus* into *Eubadizus* is unjustified (Article 33 (a) ii). It is furthermore obvious that the emendation of *Eubadizus* into *Eubadizon* is also unjustified. Thus both *Eubadizus* and *Eubadizon* are invalid because they are junior objective synonyms of *Eubazus* Nees, 1814 (Article 33 (a) ii).

Clearly *Eubadizon* Nees can only be used under a suspension of the rules and this I do not propose for several reasons. Firstly, the name is little known and seldom used except by taxonomic specialists in the Braconidae; secondly, the name has been applied in different senses in recent times (Muesebeck 1961; Koenigsmann 1964, Tobias 1967, 1971); thirdly, the name *Eubazus* Nees cannot qualify as a nomen oblitum because of its use in primary literature in the last 50 years (Brues 1926, Granger 1949, Docavo-Alberti 1960), and because it has been treated, not as a senior synonym, but as a lapsus by those who did not use it.

There is a paradoxical problem in selection of the type species of *Eubazus* (= *Eubadizon*). According to articles 32 a (ii) and 33 a (ii) *Eubadizon* Nees, 1834, being an unjustified emendation, is a junior objective synonym of *Eubazus* Nees 1814. Therefore they must take the same type species (Article 61 b). On the other hand both are available names (Articles 11, 19) and different types have been designated for them: *E. pectoralis* Nees for *Eubadizon* (Haliday

1840), *E. pallipes* Nees for *Eubazus* (Viereck 1914). I hold the Haliday designation to be invalid because the species designated was not originally included in *Eubazus* (Article 67 h). Since *Eubadizon* (and *Eubadizus*) were unjustified emendations, and therefore junior objective synonyms from the moment of publication, the rules require that they take as type species the same species as the senior synonym, *Eubazus*. This limits the choice to *E. pallipes* or *E. macrocephalus* (Article 69 a (i)). Viereck's (1914) designation of *E. pallipes* as type of *Eubazus* is the first valid designation.

There is a potential nomenclatural problem in dating the names *Brachistes* Wesmael and *Calyptus* Haliday, both published in 1835. Quite recently P. Dessart (1972) has presented new evidence that shows, about as definitely as can be demonstrated a century and a half later, that *Calyptus* Haliday has priority by one or two months.

Finally, a name is needed for the genus usually known as "*Eubadizon* Nees" in the narrow sense, i.e. the species *Ichneumon extensor* L. and its close relatives. I am now satisfied that *Charmon* Haliday (1833) is the oldest available name for this genus. *Charmon* is a valid genus having been described in a key and having also an included species, *cruentatus* Haliday. The genus was later sunk as a synonym of *Eubadizon* Nees, 1834, by its author (Haliday 1835) who apparently regarded *Charmon cruentatus* as a nomen nudum. His action, however, was unnecessary by our present rules.

The type of *Charmon cruentatus* Haliday still stands in the Haliday collection in Dublin. The only competent worker in the Braconidae to examine it was the late Mr. A. W. Stelfox, who never published his findings. Fortunately he left some notes, kindly supplied to me by Mr. C. E. O'Riordan of the National Museum of Ireland. In Stelfox's copy of the *Entomological Magazine* 3:132 under *Eubadizon pectoralis*, Stelfox inserted the annotation "*Charmon cruentatus*, ined. Hal. Vol. 1, p. 262" Further, in *Entomological Magazine* 1:262 he has inserted the annotation opposite *Charmon cruentatus*, ined. "= *Eubadizon extensor* See Hal. Vol. 3, p. 131 & specimen named *cruentatus* in Hal. Box 8, A.W.S." In one of Haliday's boxes Mr. O'Riordan found a specimen bearing simply the label "*cruentatus*," probably in Haliday's handwriting. This specimen has the anterior dorsal part of the thorax rust-red, the color extending also to the sides of the thorax.

Thus all pieces of the puzzle fit together. Haliday's name means "beautiful and blood-stained" and is most appropriate for such a uniquely colored species as *Ichneumon extensor* L. among the otherwise monotonously melanic braconid fauna of Ireland. I think there is no reasonable doubt that *Charmon cruentatus* Haliday is a junior synonym of *Ichneumon extensor* L. (= *E. pectoralis* Nees). The

synonymy of *extensor* and *pectoralis* was established long ago by Marshall (1889).

The only other generic name available for the genus of *I. extensor* L. is *Provancheria* Ashmead with type *E. gracilis* Provancher, a species very close to *extensor* L. and obviously congeneric. Thus (*Provancheria*) = *Charmon* (new synonymy). Although neither *Charmon* nor *Provancheria* has since been used, there are no junior synonyms and thus they cannot qualify as *nomina oblita*. That a generic name should stand unused in the primary literature for over 50 years is not at all unusual in little worked groups such as Braconidae.

ZOOLOGICAL QUESTIONS

The zoological questions center around the status of the entity usually known as "*Eubadizon*" on one hand and that called *Calyptus* or *Brachistes* on the other. Since the time of Wesmael and Haliday they have been separated by the length of the abdomen, which, as was correctly pointed out by Muesebeck (1957), is an unworkable and unnatural division. He followed his conclusion by synonymizing both *Brachistes* and *Calyptus* with *Eubadizon*. Nevertheless I think there is a natural group of long-abdomened parasites of Lepidoptera that can be distinguished from the mostly short-abdomened parasites of Coleoptera. The former group is small, though widely distributed, containing one well-known species, *Ichneumon extensor* L., and at least one other. This genus, for which the oldest available name is *Charmon* Haliday, can be distinguished by the presence of a well-developed interanellan vein. Such a vein is absent, even as a trace, in *Eubazus*, *Calyptus* and *Brachistes*. The venational feature, combined with the host differentiation, is enough to warrant a generic separation. Where to place *Charmon* in the classification is a decision for which there is little objective evidence. But since a placement must be made I incline to accept the view of Tobias (1967) in placing (*Eubadizon*) = *Charmon* near *Microtypus* in the (*Microtypinae*) = Orgilini. Muesebeck (1970) has also placed his "*Eubadizon*" in Orgilini. However, the tribe may be merely a symplesiomorphic conglomerate.

The genus *Charmon* Haliday contains the following species: *Ichneumon extensor* L. and *Eubadizon gracilis* Provancher, both new combinations.

The other major difficulty in this group has been the separation of *Aliolus* Say (= *Allodorus* Auct.) from *Eubazus* Nees (= *Brachistes*, *Calyptus*, *Eubadizon* Auct.). In all existing keys one must sooner or later decide whether the abdominal tergites are fused into a "carapace," which means a shell, as of a crab or turtle. This is most subjective and unsatisfactory because there are two series of intergrading forms between a normal abdomen and a "carapace." The

result has been that each author has followed his own ideas of where the division should be. The generic divisions I propose, being based on three discrete evolutionary steps, offer reasonably sharp definitions of the units.

I am limiting *Eubazus* s.l. to species with no interanellan vein, one or two interanals, four or more dorsally visible tergites and with no sharp division between the notum and epipleuron of the second and third tergites although occasionally the basal 0.1–0.3 of tergite II is sharply margined. Because the genus is quite variable but without sharp discontinuities I am recognizing three subgenera, *Eubazus*, *Calyptus* and *Brachistes*.

Eubazus pallipes Nees, the type species of *Eubazus*, is known only by tradition, but material in the collection of the first reviser, Wesmael, is well-preserved and agrees with material in other major European museums. It represents a small Holarctic group of species (a subgenus) with long, parallel-sided abdomen that has the basal two tergites, and more or less of the third, sculptured; the ovipositor is twice or more the length of the abdomen; seven tergites are dorsally visible; the second interanal is visible, either by its pigmentation or by reflected light as a ridge in the wing membrane; the first brachial cell is closed; the clypeus is narrow, being about twice as wide as long and half as wide as the face.

Eubazus (*Eubazus*) Nees contains *Eubazus pallipes* Nees (= *Eubadizon americanus* Cresson, new syn.) *Eubadizon phymatodis* Ashmead (new comb.) and *Eubadizon electus* Muesebeck (new comb.).

Calyptus Haliday is a difficult problem. *Eubazus macrocephalus* Nees was a species included by Haliday in the original description. In 1840 (Haliday in Westwood) he selected it as type of *Calyptus*. However, in trying to determine what *macrocephalus* is we are unable, of course, to consult a type. The first "reviser" was Haliday (1835, 1840) who clearly knew the species only from the literature: the second was Herrich-Schaeffer (1838) who must have had a specimen, for he published a figure, but his collection has disappeared. Next is Guérin-Ménéville (1842) who obviously misidentified it, for he published a picture of a typical *Triaspis*. Most subsequent authors seem to merely quote these early papers. In fact the search for specimens of *macrocephalus* leads me to conclude that very likely no one ever consulted Nees' type and that for practical purposes there is no traditional usage, only the original description and Herrich-Schaeffer's figure. I have not been able to locate named *E. macrocephalus* in any major European collection.

Recently He(d)qvist (1956) in describing a new species, *Eubadizon sychitae* Heq., deposited in the Natural History Museum, Stockholm, noted its similarity to *E. macrocephalus*; indeed the only way the two

species are said to differ is in the small area of very fine and weak aciculations on the second tergum of *synchitae*. Such fine aciculations could easily have been overlooked by Nees, or they may have been absent in his specimen; the size and intensity of the aciculate patches vary, even to the point of absence, in a closely related but undescribed Nearctic species, so I doubt whether the aciculations are a reliable means of separation for the European species either. Thus, the descriptions of *macrocephalus* and *synchitae* agree within the limits of variation to be expected. Significantly, they share a unique characteristic, the unusually broad head, which I have seen in no other European *Eubazus*. I believe *E. macrocephalus* Nees = (*E. synchitae* Heq.), new synonymy.

In order to achieve stability a neotype is needed. I therefore designate the holotype of *Eubadizon synchitae* Heqvist, (1956) as neotype of *Eubazus macrocephalus* Nees (1814). With this done the subgenus *Calyptus* can be defined as follows: head strongly transverse and broader than the thorax; clypeus broad, three to five times broader than long and about three-quarters as wide as the face; brachial cell open or weakly closed; abdomen beyond tergum I polished but sparsely hairy and with no sculpture or only a trace on tergum II; 5 or 6 terga visible dorsally; ovipositor two or more times as long as abdomen.

Eubazus (Calyptus) Haliday contains *Eubazus macrocephalus* Nees (= *Eubadizon synchitae* Heqvist).

Brachistes ruficoxis Wesmael, the type of the third subgenus, is still well-preserved. It is a typical member of a large, world-wide, group that may be defined as follows: head about as wide as thorax; clypeus broad to narrow; brachial cell closed; second interanal present, visible by reflected light as a ridge in the wing membrane or sometimes pigmented; abdomen with 3-6 dorsally visible terga but those behind tergum III always more or less telescoped so that the abdomen is generally short; epipleura II and III curving smoothly into the nota (except occasionally basal 0.1-0.3 of epipleuron II); terga behind the first usually with no rugose or granular sculpture but often punctate; ovipositor long or short.

Eubazus (Brachistes) Wesmael contains *Brachistes ruficoxis* Wesmael, *Calyptus rotundiceps* Cresson (= *Eubadizon submucronatus* Provancher, new syn., new comb.), *Ganychorus atricornis* Ashmead (new comb.), *Ganychorus orchesiae* Ashmead (new comb.), *Calyptus major* Cresson, and *Eubadizon salicicola* Muesebeck (new comb.).

The end point of the *E. (Brachistes)* line of evolution is represented by *Polydegmon* Foerster and *Foersteria* Szepilgeti. In these genera all terga behind the third are completely withdrawn but the epipleura II and III are large, continuous with the nota and form a part of the "carapace," yet it retains the movable articulation between terga I

Table 1. Ratios of some abdominal measurements in *Aliolus* and *Nealiolus*.

Measurements	<i>Aliolus</i>	<i>Nealiolus</i>
Length of side ¹ of tergum II/III	1.2-1.8	2.5-3.5
Median length of tergum III/length of side of tergum III	1.2-2.0	3.0-5.0
Width of tergum III/length of side of tergum III	2.5-3.5	4.5-8.0

¹ Measured along carina that separates notum from epipleuron.

and II. *Foersteria* has a strong dorsal longitudinal ridge on the hind coxa. *Calyptus tibialis* Haliday has an identical ridge, and in other structures is very close to *Foersteria*; therefore I transfer it to *Foersteria* where it forms a new combination. These two Palaearctic genera are monographed by Fahringer (1934).

Sigalphus semirugosus Nees, type of the genus *Allodorus* Foerster, is another species identified by tradition; conspecific series exist in a number of European museums. The species represents a genus close to *Aliolus* and *E.* (*Eubazus*) but differing from both in having the epipleuron II separated from the notum by a complete, sharp, carinate margin and epipleuron III curving smoothly onto the notum (the anterior 0.1-0.3 is separated by a sharp margin). Terga I and II and more or less of III are strongly longitudinally aciculatorugose; terga IV and following are smooth and protrude slightly but altogether are shorter than tergum III. This is a moderately sized Holarctic genus of closely related species that are difficult to distinguish. Most of the described species appear in catalogs under "*Eubadizon*," *Calyptus* or *Brachistes*. Many of the species placed here by European authors are actually members of the genus *Aliolus* Say.

Allodorus Foerster contains *Sigalphus semirugosus* Nees, *Brachistes crassigaster* Provancher, *Brachistes strigitergum* Cushman, *E. ernobii* Muesebeck, *E. definitus* Muesebeck, *Brachistes atricornis* Ratzeburg and *Aliolus calyptoides* Martin. All but the first are new combinations.

The genus *Aliolus* Say appears to be a further specialization of *Allodorus* through separation of the epipleuron III from its notum by a sharp, carinate margin. The genus is Holarctic; I have seen several European species, though I cannot name them. The Nearctic species were revised by Martin (1956).

There is an undescribed genus heretofore treated under *Aliolus* that I name *Nealiolus* new genus. The type species is *Sigalphus curculionis* Fitch.¹ The genus differs from *Aliolus* in structure of the

¹ This specific name is not preoccupied by *Sigalphus curculionum* Hartig because both are nouns and differ by two letters. Though both are oblique cases derived from *curculio*, the Fitch name is genitive singular; the Hartig name, genitive plural. Articles 57b (i) and 57d apply only to adjectival specific names, the endings of which are not fixed, but alter to agree with the gender of the pertinent genus.

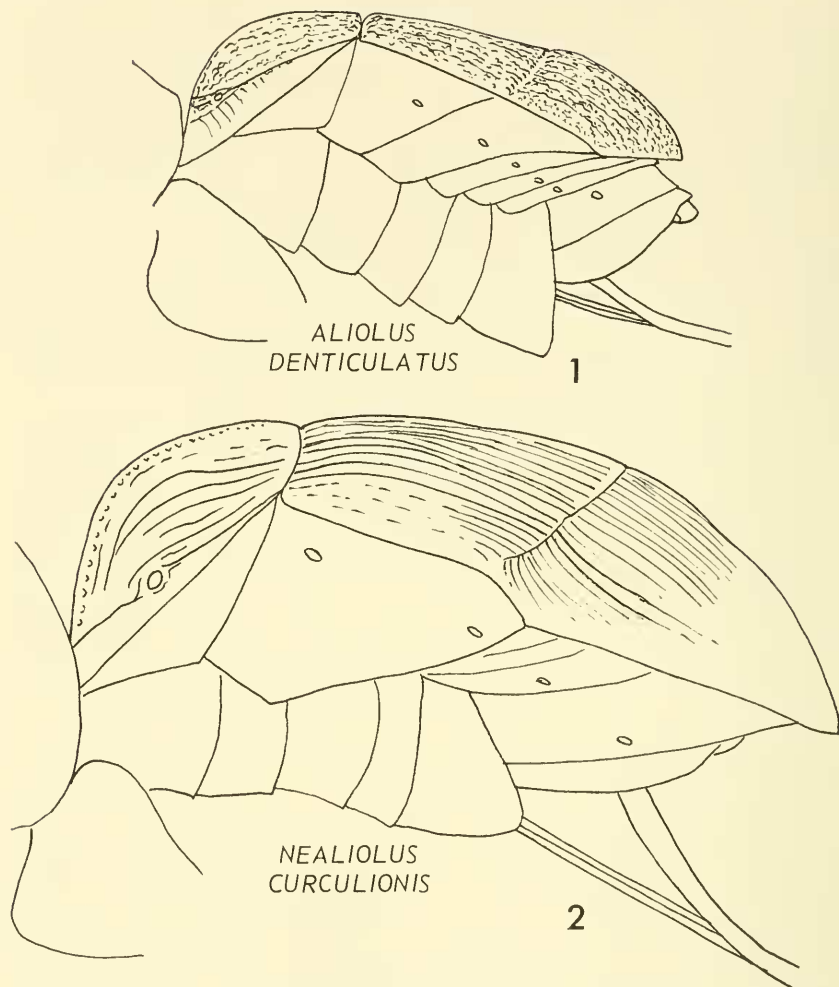


Fig. 1 and 2. Lateral view of abdomens of typical members of *Aliolus* and *Nealiolus* to demonstrate differences in proportions of epipleura II and III and differences in sculpture of nota II and III.

third tergum. In *Aliolus* the epipleuron of tergum III is separate from that of tergum II, both are subparallelograms and epipleuron III is not much shorter than epipleuron II; terga II and III are rugosostriate throughout. In *Nealiolus* both epipleura are completely fused and epipleuron III is much shorter than II; terga II and III are usually finely striate, rarely rugosostriate; tergum III is often more or less smooth. Table I and Figs. 1 and 2 elaborate the distinctions.

The following species belong in *Nealiolus*: *Sigalphus curculionis* Fitch, *Aliolus acutulus* Martin, *A. auriculatus* Martin, *Calyptus collaris* Brues, *A. crassipes* Martin, *A. inaratus* Martin (this is a depauperate male of *A. curculionis* Fitch) new syn., *Sigalphus curculionis* var. *rufus* Riley, *C. mexicanus* Cresson; probably *Allodorus venturii* Schrottky also belongs here. This genus apparently occurs only in the New World, with many Neotropical species, mostly undescribed, and a few species in the Nearctic Region. I have seen neither *Allodorus* nor *Aliolus* from the Neotropical region.

Triapis Haliday (excluding *Schizoprymnus* Foerster) and *Urosigalphus* Ashmead have been monographed by Martin (1956) for North America; *Urosigalphus* has been further revised for North and Central America by Gibson (1972a, b), *Triaspis* has been monographed by Snoflak (1953) for Europe. The latter genus is almost world-wide; the former is in the New World only.

SUPRAGENERIC GROUPINGS

I think that the best way to recognize that all the above genera (except *Charmon*) form a natural group without broad discontinuities is to place them in a single tribe. The oldest available family-group name in *Brachistoidae* (Foerster 1862), whence Brachistini (Articles 23, 23c, 36, 64). Therefore, Calyptinae (Marshall 1887) and Triaspininae (Viereck 1918) are subjective synonyms.

I define Brachistini as follows: mandibles normal, with two teeth that are neither twisted nor reversed; mouth opening normal, clypeus flat or weakly convex, the apical margin often simple and weakly convex to truncate, but sometimes centrally emarginate and produced into a small median tooth; clypeus never transversely depressed apically; wingless species unknown; forewing with the second intercubitus always absent, thus only two cubital cells, the radius (2nd abscissa) more or less evenly concave anteriorly and reaching the wing margin; prostigma not enlarged; hind wing without an interanella but with closed mediellan and submediellan cells; abdomen sessile, the first sternite always free and wider than long; ovipositor short to long but always subcylindrical and never strongly decurved; hosts as far as known always immature Coleoptera concealed in plant tissue.

This tribe is the same as Blacini of Čapek (1965, 70), except for *Blacus*, and is identical to the subfamily called Calyptinae by Tobias (1967). I think that subfamily is too high a category for this group because *Eubazus* differs from *Diospilus*, which Muesebeck and Tobias place in Helconinae, only by the absence of the second intercubital vein. In the totality of their characters the Brachistini do not even approach the level of differentiation attained by other subfamilies such as Braconinae, Rogadinae, Alysinae, Agathidinae, Microgas-

terinae, or Macrocentrinae. Brachistini is best treated as a tribe of the Helconinae (Čapek 1965, 1970) where they can be distinguished by their lack of the second intercubital vein. *Blacus* and Blacinae s. str. are unrelated (Tobias 1965-66).

KEY TO GENERA OF BRACHISTINI AND THE GENUS *Charmon*

1. Hind wing with an interanellan vein; forewing with only 1 interanal; gaster with at least 7 dorsally visible terga (Orgilini) *Charmon* Haliday
- Hind wing with no interanellan vein; forewing with 1 or 2 interanals; gaster usually with less than 7 dorsally visible terga (Brachistini) 2
2. Epipleuron of the second tergum not sharply delimited from the notum (some doubtful specimens of *Eubazus* (*Eubazus*) and *E. (Calyptus)* have 6 or more terga exposed dorsally, 2 interanal veins or the second tergum without sculpture 3
- Epipleuron of second tergum sharply delimited from the notum; only 1 interanal vein; no more than 5 dorsally (often 3) exposed terga, the first 3 much larger and more strongly sculptured than the succeeding ones; second tergum always strongly sculptured 7
3. Hind coxa with no dorsal ridge, abdomen with at least some narrow terga visible dorsally behind the third (*Eubazus* Nees) 4
- Hind coxa with a strong dorsal longitudinal ridge or tooth, abdomen with only 3 dorsally visible terga 6
4. Abdomen comparatively short, fourth and fifth terga much shorter than the third or telescoped beneath it, ovipositor usually less than twice as long as abdomen *E. (Brachistes)* Wesmael
- Abdomen longer, fourth tergum at least half as long as third, usually 6 or more dorsally visible terga, ovipositor 2 or more times as long as abdomen 5
5. Head strongly transverse and much wider than thorax or abdomen; clypeus rounded apically, about as wide as face; second and following terga smooth or very nearly so *E. (Calyptus)* Haliday
- Head less transverse and about as wide as thorax and abdomen; second and third terga mostly sculptured *E. (Eubazus)* Nees
6. Hind coxa with a conspicuous dorsal tooth *Polydegmon* Foerster
- Hind coxa with only a dorsal longitudinal ridge *Foersteria* Szépligeti
7. First tergum movably articulated with the second 8
- First tergum immovably fused with the second 10
8. Side of third tergum rounded continuously to the epipleuron on the posterior 0.7 or more *Allodorus* Foerster
- Notum of third tergum delimited sharply from the epipleuron by a lateral carina running the complete length of the segment 9
9. Epipleuron III fused with epipleuron II and reduced; length of epipleuron II/length of epipleuron III (measured along junction with notum) 3.0 ± 0.5 *Nealiolus* new genus
- Epipleuron III larger and separated from epipleuron II by a distinct suture; length of epipleuron II/length of epipleuron III 1.5 ± 0.3 *Aliolus* Say

10. Medius and radiellian veins conspicuously sinuate; nervulus joining the discoidal about midway between the basal and recurrent veins *Urosigalphus* Ashmead
 — Medius almost straight, radiellian with a single curve; nervulus joining the discoidal at or near the basal vein *Triaspis* Haliday

SPECIES WRONGLY REFERRED TO BRACHISTINI

Eubadizon basilare Prov. = *Centistes laevis* (Cress.).

Leiofaron laevis Cress. — a member of *Centistes* and itself closely related to *C. nasutus* (Wesm.) of Europe.

Sigalphus trisectus Prov. = *Centistes laevis* (Cress.)

Brachistes nasutus Wesm. — a senior synonym of *Centistes saxo* Reinhard (new synonymy). *Centistes nasutus* (Wesm.) is a new combination.

The types of these four species are all males and bear strong general resemblance to *E.* (*Brachistes*). However, they, along with all other *Centistes* differ from *E.* (*Brachistes*) in having an open brachial cell and twisted mandibles with the teeth lying in the plane of movement. *Eubazus* (*Brachistes*) have the brachial cell closed and the mandible teeth untwisted.

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TEMNOCERUS AND HETEROLABUS, A NEW SYNONYMY (COLEOPTERA, CURCULIONIDAE)

In the late 18th and early 19th centuries almost every beetle having a snout was placed in the Curculionidae. Several snouted Salpingidae were in this category, but it was not long before systematists transferred such genera and species into the correct family. However, *Temnocerus* Thunberg has still not been correctly placed. Seidlitz (1916, 1917, Deutsche Entomol. Zeitschr., 1916, p. 317, and 1916[1917], p. 390) was not sure of the correct placement of the genus; he indicated possible synonymy with one of three genera in the Salpingidae and Curculionidae but leaned toward synonymy in the Salpingidae. He was led into error by the confusion of the same pair of specific names, *planirostris* and *ruficollis*, in two different genera, *Attelabus* and *Anthribus*.

Fabricius (1801, Syst. Eleuth., vol. 2) described *Attelabus planirostris* (p. 425) from Europe and *Attelabus ruficollis* (p. 419) from South America. Today the former species is a junior synonym of *Pselaphorhynchites nanus* (Paykull) in the Rhynchitinae of the Curculionidae, and the latter is *Heterolabus ruficollis* (Fabricius) in the Attelabinae of the Curculionidae. Also, Fabricius (1801, *op. cit.*) discussed *Anthribus planirostris* (Fabricius) (p. 410) from Europe and *Anthribus roboris* Fabricius (p. 410) from Europe, with *Curculio ruficollis* L. as a junior synonym of *roboris*. Today the former species is *Salpingus planirostris* (Fabricius), and the latter is *Salpingus ruficollis* (L.).

When Thunberg (1815, Nov. Act. Soc. Sci. Upsaliensis, vol. 7, pp. 108, 110, 123) described *Temnocerus*, he cited *Attelabus* Fabricius, Syst. Eleuth., T. 2, p. 425, and included *planirostris* and *ruficollis*. Obviously Thunberg meant that Fabricius had previously included the two species in *Attelabus*. Because these two *Attelabus* species are now in the Curculionidae (as shown above), the name *Temnocerus* belongs in the Curculionidae, not in the Salpingidae. A type-species has not been designated for *Temnocerus* Thunberg, 1815, and so I designate *Attelabus ruficollis* Fabricius, 1801 (p. 419) type-species. This causes *Heterolabus* Jekel, 1860, to be a junior synonym of *Temnocerus* by isogenotypy (NEW SYNONYMY). The genus contains only two species and is limited to South America (Dalla Torre and Voss, 1930, Coleop. Cat., pars 110, p. 27).

T. J. SPILMAN, *Systematic Entomology Laboratory, HBIII, Agr. Res. Serv., USDA, c/o U.S. National Museum, Washington, D.C. 20560.*